

combination of all these possibilities.

8. (Amended) Process according to Claim 5, in which the polymerization of the lactam is carried out in the presence of one or more fillers which are introduced either into the solution from step (a) or into the mould or into the molten lactam which is added in addition to that originating from step (a) or alternatively during the in-line mixing of the lactam originating from (a) and of the lactam added in addition to that originating from (a) or a combination of all these possibilities.

9. (Amended) Process according to Claim 5, in which the catalyst is chosen from sodium, potassium, alkali metal hydrides and hydroxides, and alkali metal alkoxides such as sodium methoxide or ethoxide.

10. (Amended) Process according to Claim 5, in which the regulator is chosen from acetanilide, benzanilide, N-methylacetamide, N-ethylacetamide, N-methylformamide, (4-ethoxyphenyl)-acetamide and alkylenebisamides such as ethylenebis-stearamide (EBS) and ethylenebisoleamide.

11. (Amended) Process according to Claim 5, in which the ratio of the catalyst to the regulator, in moles, is between 0.5 and 2 and preferably between 0.8 and 1.2; the number of moles of regulator being expressed as the number of moles of amide groups.

12. (Amended) Process according to Claim 5, in which the proportion of catalyst in the lactam in step (b1) is between 0.1 mol and 5 mol per 100 mol of lactam and preferably between 0.3 and 1.5.

13. (Amended) Process according to Claim 5, in which the lactam is lauryllactam, the temperature of step (a) is between 155 and 180°C and preferably between 160 and 170°C, and the temperature of step (b) or (b1) is between 200 and 350°C and preferably between 230 and 300°C.